Approved for use through 07/31/2006. OMB 0651-0032
U.S. Patent and Trademark Office. U.S. DEPARTMENT OF COMMERCE Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

UTILITY PATENT APPLICATION TRANSMITTAL

7773 US Attorney Docket No. KEVIN M. FERGUSON First Inventor **UP-SAMPLING HALF-BAND...** Title EV 189937495 US Express Mail Label No.

(Only for new nonprovisional applications under 37 CFR 1.53(b))

APPLICATION ELEN See MPEP chapter 600 concerning utility pate		ADDF	RESS TO:	Commissi P.O. Box 1	Patent Appl Ioner for Pat 1450 a VA 22313	tents	1536/				
1. Fee Transmittal Form (e.g., PTO/SE (Submit an original and a duplicate for fe Applicant claims small entity status. See 37 CFR 1.27. 3. Specification [Total Pa (preferred arrangement set forth below) - Descriptive title of the invention - Cross Reference to Related Application - Statement Regarding Fed sponsored Ference to sequence listing, a table, or a computer program listing appendix - Background of the Invention - Brief Description of the Drawings (if file Detailed Description)	e processing) ges] as & D	(if a.	Computer Pucleotide and/capplicable, all is Specific.	necessary) uter Readable rication Seque CD-ROM or C Paper ments verifying	endix) Sequence Form (CR Ince Listing D-R (2 cop	Submission (F) g on: pies); or of above copies					
 Claim(s) Abstract of the Disclosure 			ACCOMPA	ANYING AF	PLICA	TION PARTS	<u> </u>				
a. Newly executed (original or copy b. Copy from a prior application (37 (for continuation/divisional with E i. DELETION OF INVENTOR(3 Signed statement attached deletiname in the prior application, see 1.63(d)(2) and 1.33(b). 6. Application Data Sheet. See 37 C 18. If a CONTINUING APPLICATION, check specification following the title, or in an Appli Continuation Divisional	Sheets	ation-in-par he prior ap n or division	37 CFR 3. (when they English Tr Information Statement Preliminar Return Re (Should be Certified O Nonpublic (b)(2)(B)(i) or its equiv Other: quisite information (CIP)	73(b) Statemere is an assignantial programs and assignantial processor of the control of the con	ent (nee) ument (if a (149) to	Copies of IC Citations 103) Int(s) U.S.C. 122 form PTO/SB/3 Interpretation of the control o	5 he				
19. CORRESPONDENCE ADDRESS											
Customer Number:			OR	Corre	spondence	e address belov	,				
Name TEKTRONIX, INC.											
Address Francis I. Gray, 50-LAW											
P.O. Box 500 City Beaverton	State 7% Onde										
Country U.S.A.	7	elephone	Oregon 503 627-726	 31	Fax	9/0//	119				
Name (Print/Type) Francis I. Gray					27,788						
Signature Sagnus & Lag			Registration No. (Attorney/Agent)			March 17, 200)4				

This collection of information is required by 37 CFR 1.53(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450. If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

PTO/SB/17 (10-03) Approved for use through 07/31/2006. OMB 0651-0032 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.												
			Or man lada of Maranas									
FEE TRANSMITTA	L	Application Number			er							
for FY 2004			Filing Date			March 17, 2004						
Effective 10/01/2003. Patent fees are subject to annual revision.		First Named Inventor			tor	KEVIN M. FERGUSON						
		Examiner Name										
Applicant claims small entity status. See 37 CFR 1.27		- Art Unit										
TOTAL AMOUNT OF PAYMENT (\$) 770.00		Attorney Docket No. 7773 US										
METHOD OF PAYMENT (check all that apply)	FEE CALCULATION (continued)											
Check Credit card Money Other None	3. ADDITIONAL FEES											
✓ Deposit Account:	Large Entity Small Entity Fee											
Deposit Account 20-0352		e (\$)		(\$)		Fee Description	Fee Paid					
Number	1051		2051			arge - late filing fee or oath						
Account TEKTRONIX, INC.	1052	50	2052		Surcha cover :	arge - late provisional filing fee or sheet						
Name The Director is authorized to: (check all that apply)	1053		1053			nglish specification						
Charge fee(s) indicated below Credit any overpayments		2,520				ng a request for ex parte reexamination	· · · · · · · · · · · ·					
Charge any additional fee(s) or any underpayment of fee(s)	1804	920*	1804			sting publication of SIR prior to ner action						
Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.	1805	1,840*	1805 1			esting publication of SIR after iner action						
FEE CALCULATION	1251	110	2251	55	Exten	sion for reply within first month						
1. BASIC FILING FEE	1252		2252	210	Exten	sion for reply within second month						
Large Entity Small Entity Fee Fee Fee Fee Description Fee Paid	1253		2253			sion for reply within third month						
Code (\$)		1,480	2254			sion for reply within fourth month						
1001 770 2001 385 Utility filing fee 770.00		2,010	2255			sion for reply within fifth month						
1002 340 2002 170 Design filing fee 1003 530 2003 265 Plant filing fee	1401 1402		2401 2402			e of Appeal a brief in support of an appeal						
1003 530 2003 265 Plant filing fee 1004 770 2004 385 Reissue filing fee	1403		2403		_	est for oral hearing						
1005 160 2005 80 Provisional filing fee	1451	1,510	1451			n to institute a public use proceeding						
SUBTOTAL (1) (\$) 770.00	1452	110	2452	55	Petitio	n to revive - unavoidable						
2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE	1453	1,330	2453	665	Petitic	on to revive - unintentional						
Fee from		1,330	2501	665	Utility	issue fee (or reissue)						
Total Claims 5 -20** = 0 X	1502	-	2502		_	n issue fee						
Independent Claims 3 - 3** = 0 X =	1503 1460		2503 1460			issue fee ons to the Commissioner						
Multiple Dependent	1807		1807			essing fee under 37 CFR 1.17(g)						
Large Entity Small Entity	1806		1806			ission of Information Disclosure Strnt						
Fee Fee Fee Fee <u>Fee Description</u> Code (\$) Code (\$)	8021	40	8021	40	Recor	ding each patent assignment per						
1202 18 2202 9 Claims in excess of 20	1809		2809		prope	rty (times number of properties) a submission after final rejection						
1201 86 2201 43 Independent claims in excess of 3	1009	770	2009			FR 1.129(a))						
1203 290 2203 145 Multiple dependent claim, if not paid	1810	770	2810			ach additional invention to be ined (37 CFR 1.129(b))						
1204 86 2204 43 ** Reissue independent claims over original patent	1801	770	2801			riest for Continued Examination (RCE)						
1205 18 2205 9 ** Reissue claims in excess of 20 and over original patent	1802		1802	900	Requ	uest for expedited examination lesign application						
SUBTOTAL (2) (\$)	Othe	r fee (sp	ecify) _			· · · · · · · · · · · · · · · · · · ·						
**or number previously paid, if greater, For Reissues, see above	*Red	uced by	Basic F	iling Fe	e Paic	SUBTOTAL (3) (\$)						
SUBMITTED BY (Complete (if applicable))												

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Registration No.

(Attorney/Agent)

27,788

Telephone 503 627-7261

March 17,2004

Name (Print/Type)

Signature

Francis I. Gray